

[Name of Document]     Abstract

[Problems]

To provide a fuel cell system and a process for controlling the fuel cell system which enable prevention of the increase in the pressure difference between the poles within the fuel cell, and solution of time delay by which air pressure at a cathode inlet side reaches target air pressure, during a transition period over which an airflow amount at a cathode inlet side of the fuel cell reaches the target airflow amount.

10     [Means for Solution]

When an airflow amount ( $Q$ ) and air pressure ( $P$ ) are controlled to a target airflow amount ( $Q_T$ ) and target air pressure ( $P_T$ ), respectively, accompanied by change in electric generation of a fuel cell, the air pressure ( $P$ ) is controlled to the target air pressure ( $P_T$ ) in accordance with gradual change in the airflow amount, during a transition period over which the airflow amount ( $Q$ ) reaches the target airflow amount ( $Q_T$ ).

[Selected figure]     Fig. 5

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